

MS/Standard solder contacts

Machined copper alloy contacts in a full range of sizes, with closed entry socket design in the size 12 and 16 contacts. A heavy silver-plated finish is deposited on all MS style solder contacts for maximum corrosion resistance, maximum current carrying capacity and low millivolt drop.

MS/STANDARD SOLDER CONTACTS*

| Part Number | Pin/Socket | Mating End Size | Wire Barrel Size | Allowable Wire Size | Test Current** |
|---------------|------------|-----------------|------------------|---------------------|----------------|
| 10-40569 | Pin | 16 Short† | 16 | 16 | 13 |
| 10-597107-161 | Socket | | | 18 | 10 |
| | | | | 20 | 7.5 |
| | | | | 22 | 5 |
| 10-40599 | Pin | 16 Long | 16 | 16 | 13 |
| 10-597107-171 | Socket | | | 18 | 10 |
| | | | | 20 | 7.5 |
| | | | | 22 | 5 |
| 10-33646 | Pin | 12 | 12 | 12 | 23 |
| 10-597107-131 | Socket | | | 14 | 17 |
| 10-35531 | Pin | 8 | 8 | 8 | 46 |
| 10-35532 | Socket | | | 10 | 33 |
| 10-35529 | Pin | 4 | 4 | 4 | 80 |
| 10-35530 | Socket | | | 6 | 60 |
| 10-35527 | Pin | 0 | 0 | 0 | 150 |
| 10-35528 | Socket | | | 1 | 125 |
| | | | | 2 | 100 |

* Solder Wells Filled

** Contact ratings as stated are test ratings only. The connector could not withstand full rated current through all contacts continuously. Please note that the electrical data given is not an establishment of electrical safety factors. This is left entirely in the designer's hands as he can best determine which peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

† The 10SL, 12S, 14S and 16S connectors require short contacts.

**TABLE I
CONTACT ARRANGEMENT SERVICE RATING**

| MS Service Rating | Recommended Operating Voltage* at Sea Level | | Effective Creepage Distance Nom. | Mechanical Spacing Nom. |
|-------------------|---|----------|----------------------------------|-------------------------|
| | DC | AC (RMS) | | |
| Inst. | 250 | 200 | 1/16 | |
| A | 700 | 500 | 1/8 | 1/16 |
| D | 1250 | 900 | 3/16 | 1/8 |
| E | 1750 | 1250 | 1/4 | 3/16 |
| B | 2450 | 1750 | 5/16 | 1/4 |
| C | 4200 | 3000 | 1 | 5/16 |

* The values listed in Table I represent operating values which include a generous safety factor. It may be necessary for some applications to exceed the operating voltages listed here. If this is necessary, designers will find Table II useful for determining the degree to which the recommended values of Table I can be exceeded.

**TABLE II
ALTITUDE VOLTAGE DERATING** CHART**

| MS Service Rating | Nominal Distance | | Standard Sea Level Conditions | | Pressure Altitude† 50,000 Feet | | Pressure Altitude† 70,000 Feet | |
|-------------------|------------------|----------|------------------------------------|-----------------------|------------------------------------|-----------------------|------------------------------------|-----------------------|
| | Airspace | Creepage | Minimum Flashover Voltage AC (RMS) | Test Voltage AC (RMS) | Minimum Flashover Voltage AC (RMS) | Test Voltage AC (RMS) | Minimum Flashover Voltage AC (RMS) | Test Voltage AC (RMS) |
| Inst. | 1/32 | 1/16 | 1400 | 1000 | 500 | 400 | 325 | 260 |
| A | 1/16 | 1/8 | 2800 | 2000 | 800 | 600 | 450 | 360 |
| D | 1/8 | 3/16 | 3600 | 2800 | 900 | 675 | 500 | 400 |
| E | 3/16 | 1/4 | 4500 | 3500 | 1000 | 750 | 550 | 440 |
| B | 1/4 | 5/16 | 5700 | 4500 | 1100 | 825 | 600 | 480 |
| C | 5/16 | 1 | 8500 | 7000 | 1300 | 975 | 700 | 560 |

† Not corrected for changes in density due to variations in temperature.

** No attempt has been made to recommend operating voltages. The designer must determine his own operating voltage by the application of a safety factor to the above derating chart to compensate for circuit transients, surges, etc.

MS/Standard crimp contacts

Machined from copper alloy and silver-plated for maximum corrosion resistance, with a minimum millivolt drop and a maximum current carrying capacity, the size 16 and 12 socket contacts are of the closed entry design. Crimp contacts are available for all MS insert arrangements and are identified with an Amphenol® proprietary number.

MS/STANDARD CRIMP CONTACTS

| Part Number | Pin/Socket | Mating End Size | Wire Barrel Size | Allowable Wire Size | Required Wire Adapter Sleeve | Test Current** |
|---------------------------|------------|-----------------|------------------|---------------------|------------------------------|----------------|
| 10-40553 | Pin | 16 Short† | 16 | 16 | | 13 |
| 10-40552 or 10-597109-161 | Socket | | | 18 | | 10 |
| | | | | 20 | | 7.5 |
| | | | | 22* | | 5 |
| 10-40557 | Pin | 16 Long | 16 | 16 | 10-74696-6 | 13 |
| 10-40556 or 10-597109-171 | Socket | | | 18 | | 10 |
| | | | | 20 | | 7.5 |
| | | | | 22* | | 5 |
| 10-40561 | Pin | 12 | 12 | 12 | | 23 |
| 10-40560 or 10-597109-131 | Socket | | | 14 | | 17 |
| 10-40792 | Pin | 8 | 8 | 8 | 10-74696-1 | 46 |
| 10-40793 | Socket | | | 10* | | 33 |
| 10-40564 | Pin | 4 | 4 | 4 | 10-74696-2 | 80 |
| 10-40565 | Socket | | | 6* | | 60 |
| 10-40562 or 10-581806 | Pin | 0 | 0 | 0 | | 150 |
| 10-40563 or 10-581808 | Socket | | | 2* | | 100 |

* When using wire adapter sleeve shown.

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* The values listed in Table I represent operating values which include a generous safety factor. It may be necessary for some applications to exceed the operating voltages listed here. If this is necessary, designers will find Table II useful for determining the degree to which the recommended values of Table I can be exceeded.

TABLE II

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